



25B6-G

25B6-G



POWER AMPLIFIER PENTODE

Heater	Coated Unipotential Cathode	
Voltage	25	a-c or d-c volts
Current	0.3	amp.
Maximum Overall Length	4-5/8"	
Maximum Seated Height	4-1/16"	
Maximum Diameter	1-13/16"	
Bulb	ST-14	
Base	Medium Shell Octal 7-Pin	
Pin 1 - No Connection		Pin 5 - Grid
Pin 2 - Heater		Pin 7 - Heater
Pin 3 - Plate		Pin 8 - Cathode
Pin 4 - Screen		
Mounting Position	Any	

BOTTOM VIEW (G-7S)

AMPLIFIER

Plate Voltage	200 max. volts
Screen Voltage	135 max. volts
Plate Dissipation	12.5 max. watts
Screen Dissipation	2 max. watts

Typical Operation and Characteristics-Class A₁ Amplifier:

Plate Voltage	105	135	200	volts
Screen Voltage	105	135	135	volts
Grid Voltage [▲]	-16	-22	-23	volts
Peak A-F Grid Volt.	16	22	23	volts
Zero-Sig. Plate Cur.	48	61	62	ma.
Max.-Sig. Plate Cur.	55	69	71	ma.
Zero-Sig. Screen Cur.	2	2.5	1.8	ma.
Max.-Sig. Screen Cur.	10	14.5	13	ma.
Plate Resistance	15500	15000	18000	ohms
Transconductance	4800	5000	5000	μmhos
Load Resistance	1700	1700	2500	ohms
Total Harmonic Dist.	12.5	14	15	%
Second Harmonic Dist.	7	8	8.5	%
Third Harmonic Dist.	10	11	11	%
Max.-Sig. Power Output	2.4	4.3	7.1	watts

■ In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

▲ The type of input coupling should not introduce too much resistance in the grid circuit. Transformer- or impedance-input coupling devices are recommended. When the grid circuit has a resistance not higher than 0.1 megohm, fixed bias may be used; for higher values, cathode bias is required. With cathode bias, the grid circuit may have a resistance not to exceed 0.5 megohm.

← Indicates a change.

May 1, 1941

RCA RADIODRON DIVISION
RCA MANUFACTURING COMPANY, INC.


DATA

25B8-GT



25B8-GT

TRIODE-PENTODE

Heater	Coated Unipotential Cathodes	
Voltage	25	a-c or d-c volts
Current	0.15	amp.
Direct Interelectrode Capacitances: ^o		
<i>Triode Unit:</i>		
Grid to Plate	2.2	μf
Grid to Cathode	5.0	μf
Plate to Cathode	4.6	μf
<i>Pentode Unit:</i>		
Grid to Plate	0.02	μf
Input	5.5	μf
Output	10.0	μf
Pentode Grid to Triode Grid	0.02	μf
Pentode Plate to Triode Grid	0.075	μf
Pentode Grid to Triode Plate	0.009	μf
Maximum Overall Length	3-5/16"	
Maximum Seated Height	2-3/4"	
Maximum Diameter	1-5/16"	
Bulb	T-9	
Cap	Skirted Miniature	
Base	Intermediate Shell Octal 8-Pin	
Pin 1 - Pentode Cathode	Pin 6 - Triode Cathode	
Pin 2 - Heater	Pin 7 - Heater	
Pin 3 - Pentode Plate	Pin 8 - Triode Grid	
Pin 4 - Pentode Screen	Cap - Pentode Grid	
Pin 5 - Triode Plate		
		
BOTTOM VIEW (8T)		
<u>TRIODE UNIT</u>		
<i>Typical Operation and Characteristics:</i>		
Plate	100	volts
Grid	-1	volt
Amp. Fact.	112	
Plate Res.	75000	ohms
Transcond.	1500	μmhos
Grid Bias for		
Plate Cur.-Cut-Off (approx.)	-2.5	volts
Plate Current	0.6	ma.
<u>PENTODE UNIT</u>		
<i>Typical Operation and Characteristics:</i>		
Plate	100	volts
Screen	100	volts
Grid	-3	volts
Plate Res.	185000	ohms
Transcond.	2000	μmhos
Grid Bias for		
Transcond. of 2 μmhos	-41	volts
Plate Cur.	7.6	ma.
Screen Cur.	2	ma.
<p>■ In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.</p> <p>^o Values are approximate.</p>		

May 1, 1941

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TENTATIVE DATA